GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Fisheries Department - Aqua farming - Registration of All Private Aqua labs under the Fold of Net Working of Aqua labs to ensure Standard Protocols for Analysis, Reliable Reporting System and Disease Surveillance and Monitoring - Proposals – Orders – issued.

ANIMAL HUSBANDRY, DAIRY DEVELOPMENT AND FISHERIES (FISH) DEPARTMENT

G.O.Rt.No.49 Dated 20.09.2016
Read:

From the Commissioner of Fisheries, AP, Vijayawada
Letter Rc.No.4083/P1/2016, dated 23.08.2016.

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The Commissioner of Fisheries, AP, Vijayawada in the reference read above has informed that there are about 159 Aqua laboratories existing in the State. Of which, 142 are Private Aqua Laboratories, 8 are Fisheries Department laboratories and 9 are MPEDA Laboratories. Many of the Aqua laboratories are analysing the Water Quality, few are analysing Soil Quality, Feed Quality, and very few are conducting tests on Seed quality, Microbiology, PCR and Residue Tests to cater the needs of the Aqua farmers. In a One Day orientation Programme for the Laboratory Technicians was conducted at SIFT Kakinada and discussed on the implementation of Standard protocols for analysis and report. The Commissioner of Fisheries, AP, Vijayawada has also informed that during the field visits, the Aqua farmers have expressed that the reports being given by the Private laboratories are not reliable and they were in mere confusion facing severe problems in managing the ponds and requested the Department to establish more Aqua Laboratories to provide authenticated reports. They have also expressed that the reliability of the Private laboratories will invariably increase if the Govt. Laboratories are in operation. During a Preliminary Meeting conducted on 18.8.2016 to discuss on the modalities to Monitor the Shrimp Hatcheries to ensure quality seed production, the District Fisheries Officers, Deputy Director of MPEDA, Chief Executive Officer, NaCSA, Faculty Member of Fisheries College, Muthukuru and Principal, Fisheries Polytechnic, Bhavadevarapalli of Sri Venkateshwara Veterinary University, Progressive Shrimp Farmers and officers from Department of Fisheries have suggested to establish more Aqua laboratories run by the Government for effective analysis and reporting for the benefit of the aqua farmers.

2. The Commissioner of Fisheries, AP, Vijayawada has also informed that most of the Private laboratories are being operated by staff without proper technical qualifications and training. The Data base on the observations made by them is also not available. The Commissioner of Fisheries, AP, Vijayawada has proposed and requested to issue orders to register the existing Private Aqua labs by the Department of Fisheries and to build the capacities of the Lab technicians by offering thorough training programmes in Laboratory Operations.

3. In the circumstances reported by the Commissioner of Fisheries, AP, Vijayawada and after careful consideration of the proposal, Government hereby accord permission to register the existing Private Aqua labs by the Department of Fisheries and to build the capacities of the Lab technicians by offering thorough training programmes in Laboratory Operation. In addition, the Departmental Officers in the cadre of FDOs and AIFs with higher educational qualifications will also be given training on the operation of the Aqua laboratories. A Web Portal shall also be designed and made available in the apfisheries.gov.in for Networking of all Aqua Laboratories existing in the State and to strengthen the Disease Reporting System. This will help in understanding the Status of the Diseases and allied problems and to initiate necessary immediate action to mitigate the problems in aquaculture and to

ensure SOPs for analysis and reporting and thereby to generate Data base on the Disease Surveillance and Monitoring. The State Institute of Fisheries Technology, Kakinada is designated as **Nodal Centre** for the proposed Net Working of all Aqua Laboratories.

4. The Action Plan along with Application for Registration of Aqua laboratories & Guidelines are appended herewith.

5. The Commissioner of Fisheries, AP, Vijayawada shall take necessary action accordingly in the matter.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

Dr.MANMOHAN SINGH
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
The Commissioner of Fisheries, AP, Vijayawada.
The Principal, State Institute of Fisheries Technology,
East Godavari District, Kakinada.
The Dean, Sri Venkateswara Veterinary University, Tirupati.
The Chief Executive Officer, NFDB, Hyderabad.
The Member Secretary, Coastal Aquaculture Authority, Chennai.
The Director, CIBA, Chennai.
The Chairman, MPEDA, Cochi, Kerala.
SF/SC.

//Forwarded by Order//

SECTION OFFICER

Action Plan for Registering the Private laboratories & Net Working of Aqua laboratories for Surveillance & Monitoring Aqua farming in Andhra Pradesh

Introduction:

Government of Andhra Pradesh has identified Fisheries as an important 'Growth Engine' for economic generation to the new state under Primary Sector. The **Shrimp Production is one of the Key Performance Indicators of Growth Engine**. Due to the greater potentiality for culture of Shrimp, the Department of Fisheries has been conducting, Capacity Building Programmes, Workshops, meetings, training programmes, interactions etc., for shrimp farmers & other stakeholders and facilitating to bring the barren and unproductive BW lands into culture area for achieving the targets fixed under Double Digit Programme of the Government of A.P.

Aquaculture has been the mainstay for most of the coastal districts apart from agriculture. Though the aqua farmers are reaping good harvests, there are outbreaks of diseases, water quality problems etc., in some of the aqua farms. The fish & shrimp farmers are incurring heavy expenditure to prevent toxic plankton, to control frequently recurring diseases due to poor management practices adopted. Sometimes heavy mass mortalities are noticed. It is estimated that farmers are spending an amount of Rs 1500 crores towards medicine & chemicals etc., to control the problems. There is no authenticated data base available for planning and mitigating the issues for achieving sustainability in Aqua farming.

Objective:

For achieving sustainable shrimp production, the analysis reports and the technical services offered by both Private laboratories and Government laboratories are essential. There is a greater need for preserving the Data so generated for Mitigation of issues and for sustainable aquaculture planning programmes in the State.

There are 159 aqua laboratories existing in the State. Of which, 142 are Private Aqua laboratories and 17 are Government Laboratories. The water, soil, feed, seed quality tests and isolation & identification of disease causing agents are being carried out to offer suitable suggestive measures to the aqua farmers to overcome the problems.

The Aqua laboratories of the Department of Fisheries are located at SIFT,Kakinada, Srikakulam, Visakahapatanam ,Bhimavaram, Kaikaluru, Nidubrolu & Nellore. Some laboratories are being revived, strengthened & some are upgraded to extend the service to the farmers. The farmers are requesting the Department to establish more number of Govt. Laboratories to cater to their needs and expressed that the analysis reports received from some Private laboratories are not reliable.

In view of the above, it is proposed to register the existing Private Aqua labs by the Department of Fisheries and to build the capacities of the Lab technicians by offering through training programmes in Laboratory Operation. In addition, the Departmental Officers in the cadre of FDOs, & AIFs with higher educational qualifications will also be given training on the operation of the Aqua laboratories.

It is observed that there is an urgent need for Networking of all Aqua Laboratories existing in the State and to strengthen the Disease Reporting System. This will help in understanding the Status of the Diseases and allied problems and to initiate necessary immediate action to mitigate the problems in aquaculture. For which a Web Portal need to be designed and made available in the apfisheruies.gov.in. The State Institute of Fisheries Technology, Kakinada may be designated as **Nodal Centre** for the proposed

Net Working of all Aqua Laboratories. The Data base generated at SIFT, Kakinada will be very useful in Disease Surveillance & Monitoring and to transmit the information to various Central Institutes for designing future plans to achieve sustainable aqua farming in the State and Country.

Services Rendered in the Aqua laboratories:

1. **Water Quality Parameters:** (Temperature), pH, Dissolved Oxygen, Carbon dioxide, Nitrite-nitrogen, Nitrate-nitrogen, Ammonia-nitrogen, Phospahte, Hydrogen Sulphide, Alkalinity, Hardness, Electrical Conductivity etc.)
2. **Soil Quality Parameters:** (Soil Texture, pH, Organic Carbon, Available Nitrogen, Available Phosphorus, Electrical Conductivity, Calcium and Potassium levels etc.)
3. **Physical Examination of Fish/Prawn:** (Physical examination to identify the external parasites, lesions due to Bacteria, Parasites etc.)
4. **Microscopic Examination :** (Plankton , various vulnerable organs of the fish/ shrimp to identify the disease causing agents etc.)
5. **Feed Analysis:** (Moisture content, Ash, Protein, Fat, Fibre and carbohydrate)
6. **Microbiological Tests:** (Isolation of disease causing agent (bacteria/ Fungi) through Culture in Media and to suggest remedial measures to control the diseases)
7. **Polymerase Chain Reaction Test (PCR):** The quality of shrimp seed is tested through PCR test. The Specific Disease Causing Viral particles are examined using specific Protocols.
8. **Trainings, capacity Building of the Aqua farmers – BMPs**

1. Aim:

To register and bring under Net Working of Aqua labs - Renewal for every 5 years.

2. Objectives:

a) To ensure SOPs for analysis, reporting and Data Base Management.

b) To train the Laboratory technicians to adopt Standard operating Procedures (SOP)

c) To enhance the capacity Building of the Aqua farmers through trainings, awareness camps, Demonstrations etc.,

3. Implementation:

The following committee will monitor the facilities, infrastructure of labs and training of lab personnel

a. Principal, S.I.F.T. (Member secretary)
b. District Fisheries Officer
b. Nominee of MPEDA/RGCA/NaCSA
c. Nominee of CIBA
d. Nominee of SVVU

4. Functions:

- To process the applications for Registration & renewal
- To streamline the functioning of the Laboratories

5. Logistics:

The expenditure towards travel, local hospitality, stationery and other miscellaneous items shall be met from the funds available under processing fee with the district administration and Surveillance & Monitoring.

6. Outcome:

- Effective Disease Reporting System
- Uniform SOPs in labs
- Sharing of information through Net Working
- Disease Mitigation.
- Better Yield

Annexure-I: Application for Registration of Aqua laboratories

Annexure-II: Guidelines for Registration of Laboratories

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SPECIAL CHIEF SECRETARY TO GOVERNMENT

ANNEXURE-I

APPLICATION FOR REGISTRATION / RENEWAL OF REGISTRATION

[AQUA LABORATORY AND DIAGNOSTIC SERVICES]

Application for **Registration / Renewal** of registration

1. Name of the Aqua Lab: ……

2. Address : Village/ Town:……Mandal……

District : ……State ……Pin code……

Tel. No. (With STD code)……Fax No. ……

Email id…… Mobile No.……

3. Year of starting: …….

4. Location: Panchayat Muncipality Corporation

5. **Ownership**: Individual Partnership Company

6. Name of owner of Aqua Laboratory: ……

7. Address of Owner: ……

8. **Name of person in-charge of Laboratory:**

.....

9. **Designation:**

10. Qualification:

11. Phone No. & e-mail:

12. Types of Testing and Diagnosis:

13. Details of equipment:

14. Human resource:

A). Total no. of staff as on the date of application ……

B). Please furnish the following table:

Sl. No.	**Category of Staff** Technical& Non Technical:	**Name**	**Qualification**	**Nature of Service**

(Separate sheet to be attached for various categories of staff)

DECLARATION

I, ... on my behalf and on behalf of my Aqua lab/ company/ association/firm, hereby, declare that the statements made above are correct and true to the best of my knowledge and I shall abide by all the rules and regulations as prescribed by the Department of Fisheries, Andhra Pradesh.

I, further undertake to intimate to the appropriate Registering Authority any change in particulars given above.

S I G N A T U R E

Place:
Date :

ANNEXURE-II

GUIDELINES FOR REGISTRATION & RENEWAL OF AQUA LABORATORIES

1. All aqua labs should be registered with Department of Fisheries.

2. State Institute of Fisheries Technology (S.I.F.T) Kakinada will act as the nodal agency for registrations and renewals.

3. The following committee will monitor the facilities, infrastructure of labs and training of lab personnel

   a. Principal, S.I.F.T. (Member secretary)
   b. District Fisheries Officer
   e. Nominee of MPEDA/RGCA/NaCSA
   f. Nominee of CIBA
   g. Nominee of SVVU

4. This committee will be supervised by the Commissioner of Fisheries, A.P. Hyderabad.

5. Net working of all aqua labs with S.I.F.T. Kakinada will be done for Disease reporting and information sharing.

6. As part of harmonization of all aqua labs, Standard Operational Procedures (SOP's) have to be followed.

7. Aqua labs having PCR testing facility should participate in the ring test conducted by the S.I.F.T. Kakinada in collaboration with Central Government Institutes.

8. The labs should have qualified technical personnel, invariably trained by State/ Central Govt. Institutes.

9. Proper sanitary and hygienic conditions should be maintained in the labs

10. Dress code, lab ware etc are mandatory for lab personnel

11. The lab operators should allow and cooperate the monitoring committee as and when they visit the lab.

12. The monitoring committee should check the performance and operation of aqua labs periodically.

13. All labs should maintain data sheets, proforma and registers and should report to the nodal agency. (S.I.F.T).

14. Quarterly meetings will be conducted by the monitoring committee on status of then farming accordingly Disease reporting system should be planned and implemented to formulate strategies for redressal.

15. In case of change of ownership of the lab, the same to be intimated and permission has to be obtained from Department of Fisheries.

16. All Govt & Private mobile labs need to be registered by the Department of Fisheries.

17. Validity of Registration: 3 years. Thereafter renewal has to be obtained from the Department of Fisheries.

18. The registration of Aqua labs will be cancelled at any time if they deviate the SOPs and other terms & conditions of the guidelines.